

# How to save millions of gallons and thousands of dollars!



## *Inside:* Four practical ways to conserve water.

GOVERNMENT DOCUMENTS  
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JUN 9 1988

University of Massachusetts  
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Are some of your profits going down the drain?

Several factors contribute to high water costs in rental housing: leaks, inefficient plumbing and appliances, and wasteful water use habits.

As a rental housing owner or manager, you have the power to control most of these factors.

### **Save millions of gallons . . .**

Whether you oversee a dozen rental units—or hundreds—there are several simple, cost-effective ways to reduce the massive amounts of water wasted daily. Some are as easy as distributing our free brochure that encourages your tenants to save water; others involve basic repairs, like installing new washers in dripping faucets.

Each recommendation will substantially reduce the amount of water used in your rental units and likewise reduce the amount of wastewater that enters the sewer system.

### **. . . and you'll save thousands of dollars.**

Both water and sewer rates are on the rise—a trend that is likely to continue. In many communities, sewer fees are based on the amount of incoming water recorded on your meter. Therefore, conserving water could also affect your sewer costs.

A reduction in water use will, at the very least, lessen the impact of rising costs—and could ultimately save you thousands of dollars. How much you save—and how quickly—depends on how greatly you can reduce your per-unit consumption.

**Four specific recommendations  
are detailed inside.**





Rental units comprise more than half the housing in the MWRA service area. Even a small reduction in the amount of water used by each rental unit will be a meaningful contribution to a collective savings of millions of gallons of fresh water every day. What can these savings mean to you? Money in the bank. Here are four simple, effective ways to save water in your rental housing units.

Leaky toilets, faucets, showers and pipes can account for 10% of your water/sewer bill. *The warning sign of severe leaks: per-tenant usage of 100 gallons per day (gpd) or more.*

- **A leaky toilet tank can waste 60 gpd/22,000 gallons per year. Make this simple "Toilet Test" part of your regular maintenance schedule.**

Put a dozen drops of food coloring in each toilet tank. If color appears in the bowl within 15 minutes, there's a leak.

A worn or corroded flush-valve, valve seat or ballcock assembly, or a kinked guide wire are typical causes. Replacement parts are readily available at plumbing supply or hardware stores.

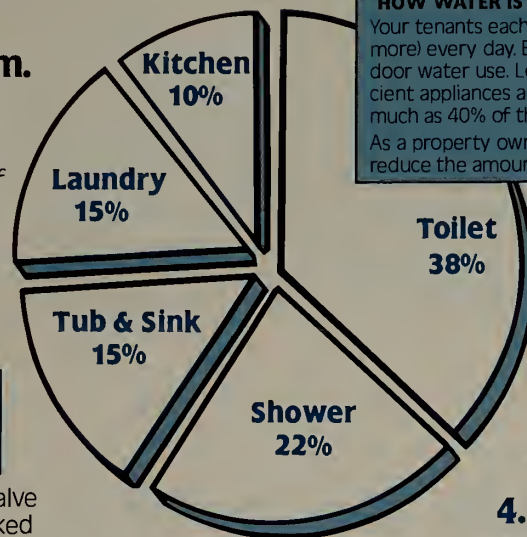
- **Trickling faucets or shower heads can waste 19 gpd/7000 gallons per year.** A new washer (25 cents) could save you hundreds of dollars a year.
- **Check both interior and exterior water pipes regularly.** Repairs may be a bit more costly, but the bigger the leak, the more money you'll save by fixing it promptly.

Three simple, inexpensive water-saving devices—all easily installed—will start saving you money right away. Install them systematically, unit-by-unit—or as units turn over. They'll last indefinitely.

- **Efficient shower heads reduce water use by 50% or more.** The design and performance of low-flow shower heads *has improved dramatically* in the past few years. They provide very satisfying, comfortable showers yet typically reduce the flow from 7 gallons per minute (gpm) to just 3 gpm—or less. Energy costs for heating hot water for showers may drop as much as 50%.

Most low-flow shower heads perform nicely with water pressure of 30 to 80 pounds per square inch—well within the range of most rental housing units.

- **Put weighted plastic bottles or toilet dams in every toilet tank.** Toilets average 5-7 gallons per flush. By displacing water in the tank or holding it back with dams, you'll save water with every single flush. (Properly installed dams usually save more water than displacement devices.)
- **Inexpensive faucet aerators decrease water flow by 25% or more.** Most people don't even notice the difference.



Thanks to consumer demand and advanced technology, a vast selection of sophisticated, yet affordable water-saving plumbing fixtures and appliances are now available. When toilets, washing machines or dishwashers in your rental units wear out, be sure

### HOW WATER IS USED (AND WASTED) EVERY DAY

Your tenants each use about 60 gallons of water (or more) every day. Bathrooms account for 75% of indoor water use. Leaky toilets, dripping faucets, inefficient appliances and careless tenant habits waste as much as 40% of the water used in each of your units. As a property owner or manager, you can greatly reduce the amount of water wasted.

to choose efficient replacements. Low-flow toilets, for example, use only 3 gallons per flush (instead of 5–7). If you have a central laundry facility, it may be cost-effective to invest in water/energy-efficient washing machines now—before they break down and need costly repairs.

Distribute "A Renter's Guide to Water Conservation." The brochure addresses questions and concerns about water conservation, and suggests numerous ways to save water simply by changing wasteful habits.

**Call 242-SAVE**  
for your supply of free brochures.  
We will deliver them to you promptly!

**WATER**  
Keep it  
on tap  
for the  
future.

A major real estate management firm installed water-saving devices (low-flow shower heads, faucet aerators) and repaired leaks throughout a 1000-unit multi-family apartment complex in Maryland.

"The owner was concerned about rising water, sewer and energy costs, and decided to do something about it," explained the firm's project manager. "Tenants were pleased with the changes we made, and were very satisfied with the new low-flow shower heads," he added. "The project was incredibly cost-effective, saving more than \$80,000 the first year. We expect to save at least that much each year."

<b>First year savings</b>	
Water & sewer*:	\$67,850
Energy to heat water:	13,500
<b>Total:</b>	<b><u>\$81,350</u></b>

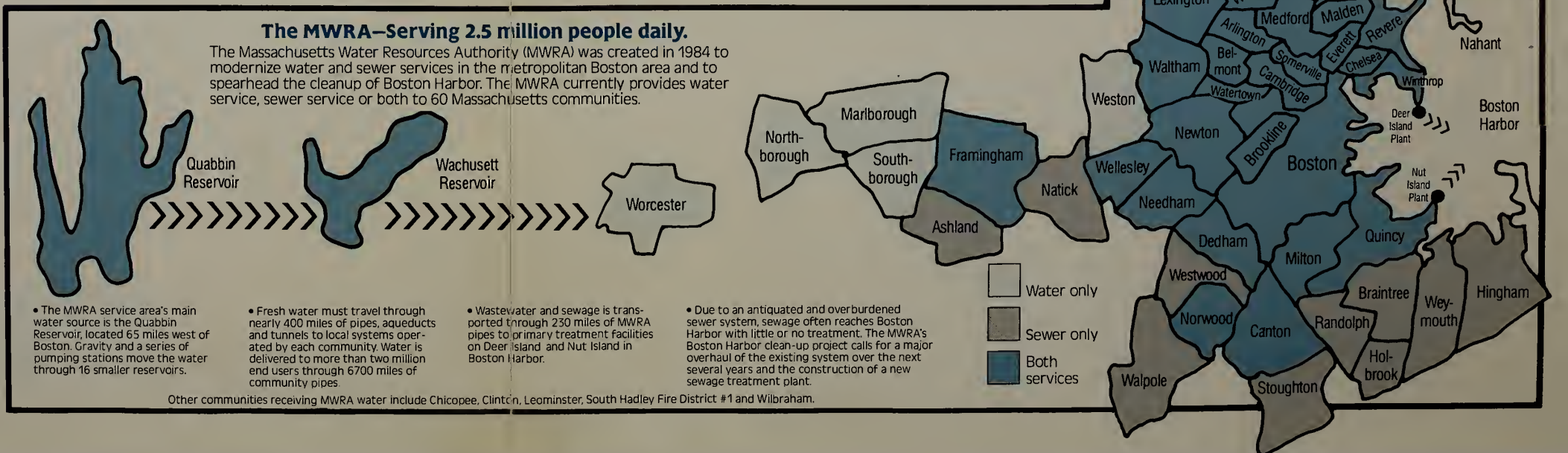
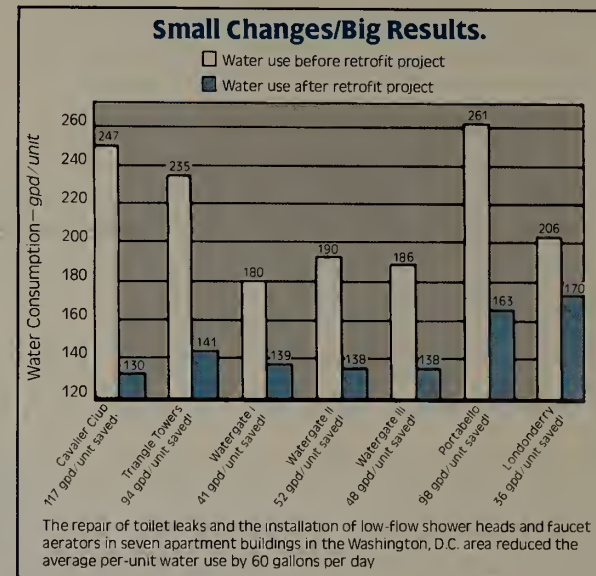
$$\frac{\$52,000 \text{ (project cost**)}}{\$81,350 \text{ (savings)}} = 8 \text{ months}$$

	Before:	After:	Saved:
Total annual water consumption	120,000,000 gallons	104,400,000 gallons	15,600,000 gallons
Average per-unit consumption per day	329 gallons	286 gallons	43 gallons
Total annual water/sewer cost*	\$522,000	\$454,150	\$67,850
Average w/s cost per unit per year	\$522	\$454	\$68
Shower heads	6-8 gpm	3 gpm	3-5 gpm
Faucet aerators	4-6 gpm	15 gpm	2.5-4.5 gpm

\*Water/sewer costs are based on \$4.35 per 1000 gallons of water. Water/sewer rates vary in the MWRA service area; Boston's 1987 rate is \$2.60 per 1000 gallons of water. Rates are expected to rise, thus shortening your payback period.

Review your most recent water and sewer bills, then plug your own "before" figures into the chart on the left. If you reduced your overall water use by 13%, how many gallons of water and how much money could *you* save?

The higher your current per-unit daily use, the greater the savings in water, sewer and energy costs you can anticipate.





# WATER—OUR PRECIOUS NATURAL RESOURCE

We have not been faced with serious drinking water shortages for many years, so we tend to take its abundance and quality for granted. Irresponsible use not only depletes our limited supply, it adds to the demand on our sewage treatment facilities—and *costs you money!*

## Planning now and for the future.

The Long Range Water Supply Program is one of many aggressive plans initiated and managed by the MWRA. Its objectives are to maximize the use of existing water resources, to reduce water demand, and to assure that MWRA and community distribution systems work efficiently. The program includes:

- Leak detection and repair of 6700 miles of community water pipes
- Improved water metering
- Residential, commercial, industrial and community water conservation programs
- Public education campaigns

## Help us. Help yourself.

We should all be willing to be part of the solution—because we are all part of the problem. Each time we wash dishes, take a shower or flush the toilet, we contribute to the pollution of Boston Harbor. Each time we waste water, we endanger the supply for future generations.

Powerful, effective plans to repair and upgrade water and sewer services, and to clean up Boston Harbor are well underway. Much has been accomplished; far more needs to be done. We're working hard, but we need your help.

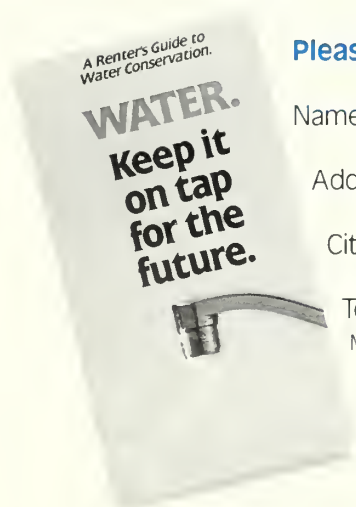
**Start by calling 242-SAVE** right now for free water conservation brochures for your tenants—or send in the coupon below. We welcome your questions and comments, and will assist your efforts in any way possible.



## Massachusetts Water Resources Authority

Charlestown Navy Yard  
100 First Avenue  
Boston, MA 02129

## 242-SAVE



Please send me \_\_\_\_\_ brochures right away!

Name \_\_\_\_\_ Company \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Telephone \_\_\_\_\_

Mail to: Massachusetts Water Resources Authority  
Waterworks Division  
Charlestown Navy Yard  
100 First Ave., Boston, MA 02129